**General Certificate of Education (A-level)
January 2013**

Geography   **GEOG2**

(Specification 2030)

Unit 2: Geographical Skills

Mark Scheme

Mark schemes are prepared by the Principal Examiner and considered, together with the relevant questions, by a panel of subject teachers. This mark scheme includes any amendments made at the standardisation events which all examiners participate in and is the scheme which was used by them in this examination. The standardisation process ensures that the mark scheme covers the candidates' responses to questions and that every examiner understands and applies it in the same correct way. As preparation for standardisation each examiner analyses a number of candidates' scripts: alternative answers not already covered by the mark scheme are discussed and legislated for. If, after the standardisation process, examiners encounter unusual answers which have not been raised they are required to refer these to the Principal Examiner.

It must be stressed that a mark scheme is a working document, in many cases further developed and expanded on the basis of candidates' reactions to a particular paper. Assumptions about future mark schemes on the basis of one year's document should be avoided; whilst the guiding principles of assessment remain constant, details will change, depending on the content of a particular examination paper.

GEOG2 General Guidance for GCE Geography Assistant Examiners

Marking – the philosophy
Marking should be positive rather than negative.

Mark schemes – layout and style
The mark scheme for each question will have the following format:
  a) Notes for answers (nfa) – exemplars of the material that might be offered by candidates
  b) Mark scheme containing advice on the awarding of credit and levels indicators.

Point marking and Levels marking
  a) Questions with a mark range of 1-4 marks will be point marked.
  b) Levels will be used for all questions with a tariff of 5 marks and over.
  c) Two levels only for questions with a tariff of 5 to 8 marks.

Levels Marking – General Criteria
Everyone involved in the levels marking process (examiners, teachers, students) should understand the criteria for moving from one level to the next – the "triggers". The following general criteria are designed to assist all involved in determining into which band the quality of response should be placed. It is anticipated that candidates' performances under the various elements will be broadly inter-related. Once the Level has been determined, examiners should initially set the mark at the middle of the mark range for that level (or the upper value where no mid value exists). Then refine the mark up or down using the General Criteria, Notes For Answers and the additional question specific levels guidance. Further development of these principles will be discussed during Standardisation meetings. In broad terms the levels will operate as follows:

Level 1: attempts the question to some extent (basic)
An answer at this level is likely to:
  • display a basic understanding of the topic
  • make one or two points without support of appropriate exemplification or application of principle
  • demonstrate a simplistic style of writing perhaps lacking close relation to the terms of the question and unlikely to communicate complexity of subject matter
  • lack organisation, relevance and specialist vocabulary
  • demonstrate deficiencies in legibility, spelling, grammar and punctuation which detract from the clarity of meaning.

Level 2: answers the question (well/clearly)
An answer at this level is likely to:
  • display a clear understanding of the topic
  • make one or two points with support of appropriate exemplification and/or application of principle
  • give a number of characteristics, reasons, attitudes ("more than one") where the question requires it
  • provide detailed use of case studies
  • give responses to more than one command e.g. "describe and explain.."
  • demonstrate a style of writing which matches the requirements of the question and acknowledges the potential complexity of the subject matter
  • demonstrate relevance and coherence with appropriate use of specialist vocabulary
  • demonstrate legibility of text, and qualities of spelling, grammar and punctuation which do not detract from the clarity of meaning.

CMI+ annotations

- The annotation tool will be available for levels response questions.
- Where an answer is marked using a levels response scheme the examiner should annotate the script with 'L1' or 'L2' at the point where that level has been reached. At each point where the answer reaches that level the appropriate levels indicator should be given. In addition examiners may want to indicate strong material by annotating the script as "Good Level…". Further commentary may also be given at the end of the answer. Where an answer fails to achieve Level 1 zero marks should be given.
- Where answers do not require levels of response marking, the script should not be annotated. For point marked questions where no credit-worthy points are made, zero marks should be given.

Other mechanics of marking

- Various codes may be used such as: 'rep' (repeated material), 'va' (vague), 'NAQ' (not answering question), 'seen', etc.
- Unless indicated otherwise, always mark text before marking maps and diagrams. Do not give double credit for the same point in text and diagrams.

Question 1

1 (a) (i)   2×1 for each accurate plot. Use of key not essential but plots must be joined up.   *(2 marks)*
Maximum 1 if points are not joined. One plot not joined – 0 marks.

1(a)(ii)   Notes for answers   *(5 marks)*

Responses should show an understanding of the patterns shown on the radial diagram. This should include the appropriate use of data as well as clear comparative statements, e.g.
The two surveys have produced very different patterns of traffic. The route into the town centre has relatively low number of vehicles at 06.00 (40) but this number quickly rises to a peak of 140 vehicles by 09.00. This is compared to much smaller increases in the traffic flow out of the town centre. By 09.00 the traffic flow is 90 vehicles less at only 50, with a peak flow of traffic out of town between 16.00 and 17.00 hours. Overall, on this day, there are more cars leaving than entering.

Level 1 (Basic) 1-3 marks
Basic understanding of radial diagrams. May pick out some basic information and be able to interpret some data from the diagram. Limited comparison. May drift away from the theme of the question at the bottom end.

Level 2 (Clear) 4-5 marks
Aware of the trends shown by both sets of data. Makes clear comparative statements and uses data to support answers. May manipulate data. May spot anomalies or inconsistencies in the flows.

1 (b)   Notes for answers   *(5 marks)*

For description responses should show awareness of two or more of the following differences:

- Density of housing
- Variety of housing types with possible reference to design differences
- Variation in green space (grass verges apparent in Figure 2a)
- Variation in parking type (garages and driveways in Figure 2b versus on road parking in Figure 2a)

The key is that evidence is derived from the photographs.

The comment is likely to reflect the variation in wealth. Some may directly refer to poor and rich areas, and/or private housing (Fig 2b) versus social housing (Fig 2a). More sophisticated comment might elaborate with reference to affordable housing for lower income families and vice versa. Some may consider segregation based upon employment/income.
Be aware of potentially creditworthy material annotated on Figures 2a and 2b.

Level 1 (Basic) 1-3 marks
Describes basic differences using simple language such as '... more houses in Figure 2a than 2b'. Limited breadth of differences described or lacking detail in that which is considered. Comment is basic or absent altogether. One difference only. May only comment.

Level 2 (Clear) 4-5 marks
Detailed awareness of differences between Figures 2a and 2b. Considers at least two differences and considers differences in detail. Comment must be present and must have some element of sophistication for full marks.

1 (c)   <u>Notes for answers</u>   *(8 marks)*

The census data provides key indicators of health, employment and educational attainment in secondary school age pupils. The data also provides a snapshot of income. Professional occupations tend to be more highly paid than other employment sectors so it is reasonable for candidates to make assumptions about the relative affluence of the areas based on this data. Expect to see candidates compare Esk Road SOA and Farriers Way SOA.

Essentially the SOA which comprises Esk Road is likely to be a more deprived area. It has higher rates of illness and people claiming illness related benefits. This is significantly higher than the SOA containing Farriers Way, is also higher than the national average. Expect to see use of data to exemplify. Some may manipulate data.

A similar pattern can be noted with employment and education. People in professional occupations are well down in the Esk Road SOA compared to Farriers Way and national average. Educational attainment is well below national average in Esk Road.

The implications are that general welfare state benefit claims are likely to be higher in Esk Road. Some may develop their implications into cycle of deprivation drawing links between low employment, poor housing, poor health and low educational attainment. This is a legitimate approach.

Candidates may draw upon the images provided in Figures 2a and 2b in this answer. This is acceptable.

Level 1 (Basic) 1-4 marks
Comparison may be basic and there may be some misunderstandings at the bottom end. May miss the UK element. Some use of data may be apparent. Implications for social welfare are lacking or very basic. There may be some misunderstandings around social welfare.

Level 2 (Clear) 5-8 marks
Implications have clear links to social welfare. Comparison is more detailed, with use of figures to support statements. There may be manipulation of data. All three areas (Esk Rd, Farriers Way, UK) must be considered for Level 2.

1 (d)   <u>Notes for answers</u>   *(5 marks)*

The response depends upon the chosen applications. The specification makes reference to remotely sensed data, databases and geographical information systems (GIS). Candidates are not limited to these ICT applications and may also refer to programmes such as Excel.

Databases such as The Met Office provide a vast amount of information allowing for detailed analysis of rainfall and other weather patterns. This allows for comparison between areas as well as predicting the impact of particular events. This is useful for both river field studies as well as theoretical examination of river processes and flooding. Such databases can also be used to support case studies as well as providing the basis for field investigations.

Level 1 (Basic) 1-3 marks
Limited awareness of appropriate ICT applications which may be generic. May drift into description of ICT applications. May make one or two simple points, but not well supported with explanation.

Level 2 (Clear) 4-5 marks
May lack breadth but clearly focused upon the benefits of ICT applications. Clear links to improving geographical understanding. More sophisticated understanding of the benefits linked to geographical outcomes.

Question 2

2 (a) (i)   The characteristics may be physical or human (or a combination of both)   *(5 marks)*
depending upon the type of study. Characteristics may also include location
information, e.g.
The study was conducted at the road intersection between Hall End Avenue and
Rookery Road in Town X. In this area census data confirms that there is an
ethnically diverse population and also a broad mix of housing types. There is a
combination of terraced housing and modern built semi-detached properties.
Service provision also varies between those provided for the multicultural
element of the community (such as a local Afro Caribbean Centre) and those for
the wider community such as leisure centres as well as a range of retail facilities.

Level 1 (Basic) 1-3 marks
Basic description only. May emphasise geographical place names at expense of
local characteristics. Basic consideration of local characteristics with evidence
of misunderstanding at the bottom end. Could be anywhere.

Level 2 (Clear) 4-5 marks
Describes the location in detail. Clearly focused upon physical and/or human
characteristics as appropriate. Description of characteristics shows clear
geographical understanding for full marks.

2 (a) (ii)   <u>Notes for answers</u>   *(5 marks)*

There are broadly three elements to risk assessment. These include identifying
the risks, minimising the risks and ongoing assessment during the visit. Credit is
available here for the identification of the risks, but for Level 2 there must be
some consideration of the measures taken to minimise these.

Level 1 (Basic) 1-3 marks
Describes basic risks with a limited awareness of how this links to the actions
then taken to minimise the risks. Unlikely to show an awareness of the ongoing
risk assessment process during the day. May consider only one risk or
management only.

Level 2 (Clear) 4-5 marks
Considers more than one risk and is clearly aware of the risks and the
management of them. Describes risks and link to actions taken to minimise the
risks. Can score full marks with just these two parts of the process. May also
show an awareness of ongoing risks.

2 (b)   Notes for answers   *(6 marks)*

The aim should be outlined either implicitly or explicitly. It should link to the specification. The justification of the method should show how this was appropriate in helping to achieve the aim. Beware of long description of the method as this is not the question. The response should be more concerned with how the method was designed in such a way as to investigate the aim.

Justification may consider advantages of method and only refer to the aim rather than directly link back to the aim. This is a legitimate approach.

Level 1 (Basic) 1-4 marks
Description of the method with little reference to the aim. Limited justification either in terms of advantages or link to aim.

Level 2 (Clear) 5-6 marks
Clear aim with links between this and the method. The response shows a clear understanding of how the method helped to achieve the aim. May consider advantages of method and only state the aim.

2 (c)   Notes for answers   *(5 marks)*

Responses should show an awareness of the data transformation process. The response should show how the various stages in the generation of the technique occur. The specific technique should be appropriately named. Some candidates may describe the presentation of a technique using electronic media such as Microsoft Excel. This is acceptable as long as the process is explained at a comparable level of detail.

Approaches which are based on analysis can only score credit if the focus is presentation, e.g. tabular format.

Max Level 1 for describing technique with no reference to candidate's own data.

For example, "We used proportional divided circles to represent our river load data. We first calculated the estimated volume (length x breadth x depth) of each piece of river material and then took an average of the ten sediments. This gave us an average volume. We then used a simple formula where radius is equal to the square root of the area divided by π (pi). For area we used the volume of the pebble measured in cm^3. This gave us a proportional radius which, using a compass then gave us a proportional circle for location. We then used an overlay to display this data on a sketch map of the area."

Level 1 (Basic) 1-3 marks
The technique may not be correctly named. At the bottom end, description may not relate to the named technique. Poorly described, with clear gaps in understanding of how to construct the chosen presentation technique. May choose an inappropriate technique or describe a very basic technique such as creating a table.

Level 2 (Clear) 4-5 marks
A step-by-step guide through the transformation of data from numerical form through to the completion of the chosen technique. Bottom Level 2 may have

some obvious error or omission but with a general sense that the technique is understood. For full marks there must be reference to candidate's own data.

2(d)   Be aware that this is a summary of findings. For example, listing of results at   *(4 marks)*
particular river sites or street intersections does not constitute a summary. Allow 1 mark per valid point made in relation to findings. Max 1 for use of numerical data to support statements.

Beware of vague statements.

For example we found that the river velocity increased with distance downstream. For instance, at Site 1 we calculated a figure of 0.3m/sec, but this increased to 0.7m/sec by the final site. There were some anomalies though, for instance Site 7 registered a decrease in velocity of 0.4m/sec. We concluded that Site 7 had some human factors related to river management which affected the data.
Maximum 2 for detailed listed data at different sites.
Maximum 2 for listed conclusions.